BDCP
Bay Delta Conservation Plan

Facts about the BDCP Approach to "Other Stressors"

The BDCP has identified several issues that affect the survival of covered species in the Delta, beyond water exports and habitat conditions. These "other stressors" include:

- exposure to contaminants
- competition, predation, and changes to the ecosystem caused by non-native species
- entrainment at water intake pumps not operated by SWP and CVP
- harvest (commercial and recreational fishing, poaching)
- hatcheries
- fish passage (including flows and barriers)
- disease and parasites
- other water quality issues (dissolved oxygen, temperature)

The BDCP Other Stressors Working Group (OSWG) identified and described these stressors on fish and developed a preliminary list of conservation measures to address these stressors. The group has identified those that could be most readily and accurately measured in order to evaluate their true benefit to covered species. These conservation measures, listed below, will undergo the Delta Regional Ecosystem Restoration Implementation Plan's (DRERIP) suite of species life history models and then will be either removed from consideration or refined and further developed. There are many other potential conservation measures that are in discussion and will continue to be evaluated; those listed below are only those that will be evaluated by DRERIP.

Non-Native Invasive Species

The OSWG is investigating ways to 1) help reduce the future colonization and establishment of non-native species in the Delta to an acceptable level of risk, 2) help reduce the extent of non-native aquatic vegetation to improve conditions for covered species, and 3) help reduce the adverse effects of non-native predators on covered fish species. Examples under consideration include:

- Support watercraft inspection programs to prevent future invasions of non-natives into the Delta.
- Support chemical and mechanical removal of non-native aquatic vegetation (e.g., water hyacinth [*Eichornia crassipes*], Brazilian waterweed [*Egeria densa*]) in localized "hot spots" that are important habitat for covered species.

Toxic Contaminants

The OSWG is investigating ways to reduce the load of contaminants entering the Delta ecosystem from both upstream and in-Delta sources. Examples under consideration include:

- Improve treatment processes at wastewater treatment facilities to reduce loads of contaminants into the Delta.
- Support the efforts to reduce the load of methylmercury entering the Delta.
- Encourage and support eco-friendly agricultural practices.

Hatcheries

The OSWG is investigating ways to preserve wild populations of covered species. Examples under consideration include:

- Support the operations of delta smelt genetic refugial populations to preserve populations and genetic integrity.
- Support the construction and operations of a new conservation hatchery to serve as a genetic refuge and to enhance the low natural abundance of delta and longfin smelt in the Delta.

Harvest

The OSWG is investigating ways to help manage legal harvest (sport and commercial fishing) and reduce illegal harvest (poaching) of Chinook salmon, steelhead, green sturgeon, white sturgeon, and Sacramento splittail. Examples under consideration include:

- Increase enforcement of fishing regulations to reduce illegal harvest of covered fish species in the legal Delta.
- Set regulations on bag and size limits for Sacramento splittail to maintain and enhance splittail populations.

Non-Project Diversions

The OSWG is investigating ways to help reduce entrainment at in-Delta water diversion and pumping facilities to an acceptable level of risk. Examples under consideration include:

- Support existing programs to screen non-project diversions, thereby reducing entrainment risk of covered fish species at non-project diversions.
- Investigate interest by non-project diverters to remove or relocate individual non-project diversions from high to lower quality habitat for covered fish species.

Other Water Quality Issues

The OSWG is investigating ways to protect existing habitat from loss and degradation. Examples under consideration include:

- Modify agricultural return practices to reduce water temperatures of return flows to Delta waterways.
- Support existing programs to improve dissolved oxygen conditions in the Stockton Deep Water Ship Channel.
- Coordinate with owners/managers of seasonal managed wetlands to improve quality of water released from these wetlands ("black water") by modifying operations.

Examples of other types of potential conservation measures that may be further developed include:

- Developing public outreach and education programs to inform the public about areas of concern and to encourage specific ways to help.
- Improving real time monitoring, assessment, and rapid response programs.
- Improving the temperature and quality of water that is returned to the Delta after it has been used for industrial, commercial, and agricultural purposes.

The purpose of the BDCP is to provide for the recovery of endangered and sensitive species and their habitats in a manner that also will provide for the protection and restoration of water supplies.

For more information about the BDCP, contact: Keith Coolidge, 916/445-0092. For more information about Other Stressors, please contact: Rick Wilder, 916/446-3980.